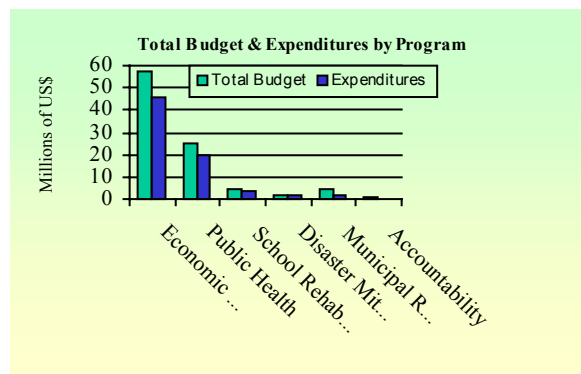
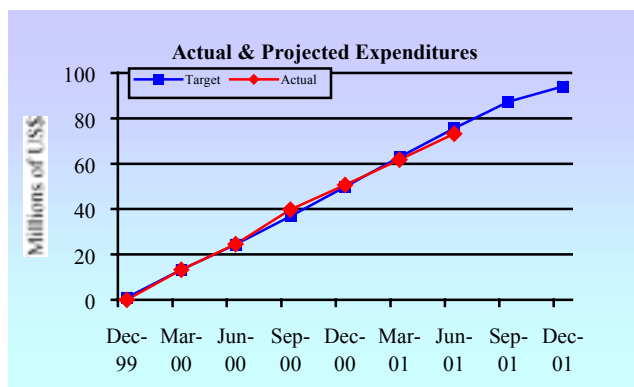


USAID Nicaragua Supplemental Reconstruction Programs Response to Hurricane Mitch, October 1998 Status as of June 30, 2001

MAY 1999 SUPPLEMENTAL RECONSTRUCTION FUNDS (CACEDRF)	TOTAL BUDGET	OBLIGATIONS	COMMITMENTS	EXPENDITURES
	\$94,108,000	\$94,108,000	\$91,890,405	\$73,242,943



Impact of Hurricane Mitch

Hurricane Mitch was the worst natural disaster in Nicaragua's history. Over 3,000 people lost their lives, with the most tragic loss occurring at Posoltega where some 2,000 died in one huge landslide. Eighteen percent of the total population, 870,000 people, were affected by the storm.

The productive sector was hit particularly hard. An estimated 11,550 hectares of agricultural land were destroyed. Another 308,000 hectares (25% of the country's total cropland) were seriously damaged. Potable water and wastewater systems serving 804,000 people suffered over \$560 million worth of damage. Ninety health centers and more than 400 health posts were damaged. Over 500 primary schools were damaged structurally. Total damages are estimated at U.S. \$1.5 billion – 70 percent of Nicaragua's 1998 Gross Domestic Product.

Initial USAID Response

Immediately after the hurricane struck, the United States provided nearly \$22 million in

emergency humanitarian and food assistance. USAID reallocated an additional \$8 million to jump-start reconstruction activities in the public health, agriculture and micro-finance areas prior to the passage of the Supplemental Reconstruction funds in May 1999.

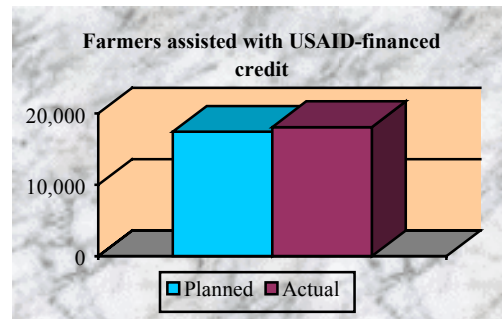
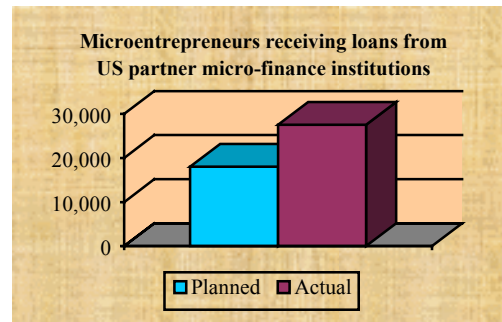
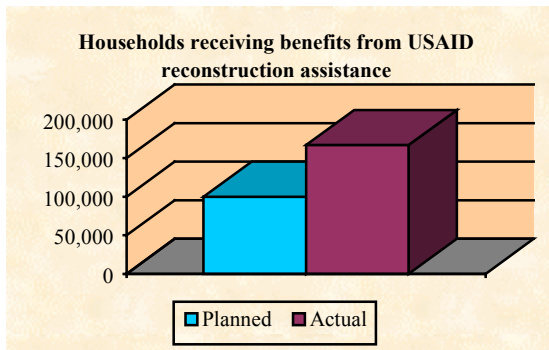
Reconstruction Programs

Based on disaster assessments, pledges from other donors and an analysis of USAID's capabilities, USAID decided to use Supplemental Funds to support reconstruction in the following areas:

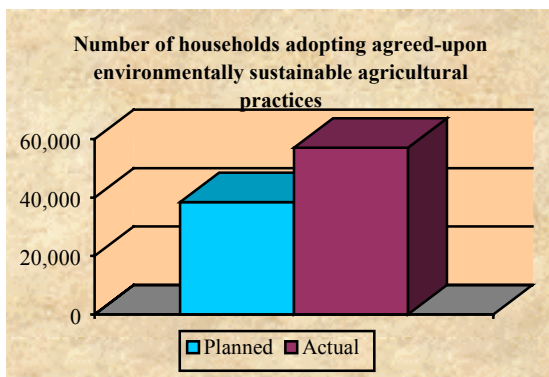
Economic Reactivation

USAID targeted its assistance to restore the economic livelihood of 100,000 farmers, laborers and microentrepreneurs. This includes rehabilitating or improving 1,375 kilometers of farm to market roads (thereby opening up another 1,875 kilometers of roads), training 35,000 small farmers to use environmentally sustainable practices, protecting 8,000 hectares of watershed, and providing credit to 17,450 farmers and 18,000 microentrepreneurs.

- USAID's partners have reported that, as of the June 30, 2001, over 167,000 households have benefited from Mitch assistance. Of these, 42,000 households have participated in food-for-work or cash-for-work programs, primarily for road rehabilitation and more than 57,000 households have incorporated environmentally sustainable agricultural practices on their farms.

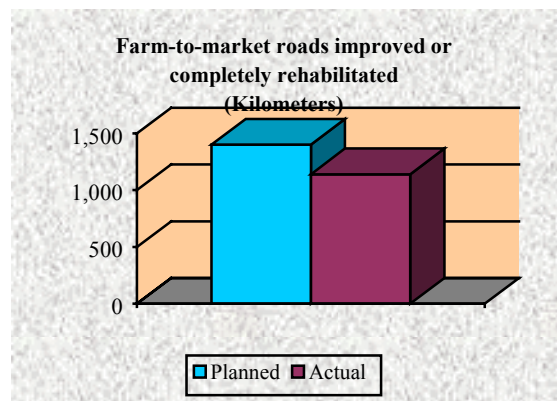


- Over 8,500 hectares of watersheds have been protected with stabilization efforts, exceeding the original target of 8,000 hectares.



- More than 1,100 kilometers of roads have been improved or rehabilitated. Principal partners are CARE, Adventist Development Relief Agency, Save the Children, and Project Concern International.

- The road program has benefited over 37,000 families living in more than 850 communities and has, in turn, opened up access to another 1,400 kilometers of roads that would have otherwise remained isolated from the nation's broader transportation network.



- Reconstruction funds and reflows of nearly \$8.1 million in Mitch funds has been lent to 27,482 micro-entrepreneurs (over 75 percent of whom were women) and another \$6.1 million has been lent to approximately 18,000 agricultural producers.

- Using Mitch funds, the USDA, in collaboration with World Relief, is assisting the GON to combat an outbreak of Pine Bark Beetles in the Municipality of Jalapa, in Nueva Segovia. Unless controlled, pine bark beetles will cause an estimated \$20 million in economic losses in this municipality alone. Under the \$153,000 program, a strip of land nearly 15 km long and 250 meters wide was clear cut to prevent the spread of the infestation.
- Following Hurricane Mitch, many of the survivors of the Casita mudslide were relocated to a community, Finca Santa Maria. With USAID funding, CARE has been working with these families to identify income generating activities, including poultry breeding and egg production, pig farming, and irrigated vegetable production.
- Catholic Relief Services and CARITAS are implementing a pilot organic onion project with small producers in the Sebaco Valley. CARITAS provided credit to purchase drip irrigation equipment and training in preparing organic fertilizers. Pests were controlled with neem tree oil, liquid soap, and other botanical insecticides. These farmers sell their production at nearly twice the price of non-organic onions. With the next harvest, they will be able to pay off all of their loans.
- Five project-assisted dairy processing plants have exported over 1.2 million pounds of dry hard cheese, with a value of over \$1.5 million, to Honduras, El Salvador and the U.S.
- The "primera" crop season, planted in May and harvested in August, suffered crop losses of between 30 and 100 percent. The Mitch program covers some of the most affected areas. USAID Mitch partners are reviewing their programs to meet the immediate needs of drought-stricken farmers.
- USAID/Washington has approved \$10 million PL-480 Title II programs for four of our Mitch partners, (CRS, SAVE, PCI, and ADRA), enabling them to continue their activities in Mitch areas.

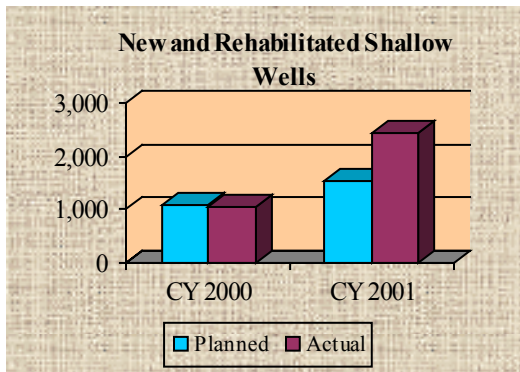
Public Health

This component is improving the health of families in Mitch-affected communities by increasing access to health services and rehabilitating or installing rural water and sanitation systems. After reviewing the NGOs' second year work plans, USAID and the Ministry of Health increased targets for repairs or construction as follows: 2,500 shallow wells, 210 deep drilled wells, and 5,900 latrines. The target for construction of seepage pits was reduced to 830 pits, but the reduction will be partially offset by the addition of a new activity to construct 260 compost latrines. Further, to clarify the number of institutions that will be reconstructed, the targets are restated as one hospital (completed), six major and two minor health centers, 19 health posts, and housing for staff adjoining 22 of these facilities. Training and health education is also provided to families in remote rural areas affected by Mitch.

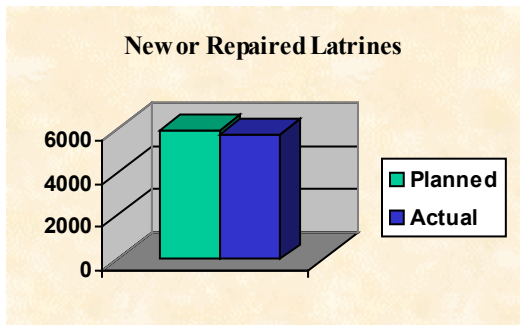


- 1,215 additional wells were built or rehabilitated during the second quarter of 2001, bringing the total number to 2,440.

- This activity, slightly behind schedule in the previous report, has now exceeded the target by 645 wells.



- More than 1,160 new latrines were built in the second quarter of 2001. This brings the total to over 5,740, exceeding our target of 5,230.



- 429 additional seepage pits were completed in the second quarter bringing the total to 600 environmental projects out of 830 programmed for the entire project. The remaining 230 will be finished by August 31.
- More than 175 wells have been drilled in the Hurricane Mitch affected rural communities using USAID-funded deep well drilling rigs. This number exceeds the target of 160 drilled wells for the complete project. The PVO contractor was able to finish these at a cost below budget, which will allow them to drill wells at no additional cost to USAID through the end of the project. USAID continues to expect that the project target will be exceeded by 50 wells.



- The USAID Environmental Health Project (EHP) has provided over 10,000 community and household training visits since the start of the program. This is necessary to improve health behavior related to the new water and sanitation infrastructure, and ensure a reduction in the incidence of diarrhea and other water borne illness. Approximately 70,000 children and adults have participated in these training events.
- Profamilia, Nicaragua's leading private non-profit health care provider, in conjunction with the Mitch funded CMS project, completed construction of the franchised health clinics in Sebaco and Esteli, and received accreditation for operating the clinics from the Ministry of Health. Advertising campaigns have helped make the launch of the Sebaco clinic the best attended to date. Both these clinics and the Tipitapa clinic are providing family health services and 24-hour emergency assistance, and are on course for becoming fully sustainable in the year 2002.



- The franchise model is functioning effectively. During the first two months the three clinics provided 1800 general consultations, 1400 gynecological services, and 1000 pediatric and pre-natal checkups. The income generated in each of the clinics has increased each month.
- Prosalud completed construction on an additional three health posts and one health center.
- In coordination with MINSA, Prosalud has installed 150 of 175 stationary radios and 42 of 44 mobile radio systems. The system, together with the health ministry radio communication system, provides coverage for over 55% of the country. The system saves lives. In the first months of operation the improved communication system helped prevent five maternal deaths.
- The NicaSalud Network of 21 PVO/NGO grantees, in coordination with the Ministry of Health, distributed medical supplies and equipment including furniture for health posts, surgical tools and other supplies and materials for improving maternal and childcare. Training for equipment use as also provided to midwives in San Rafael del Norte and La Concordia.
- In Jinotega Partners of the Americans and Project Hope have supported family hen houses to improve food resources. Beneficiary families must have children less than 5 years of age or pregnant women

in the household. They must agree to replace the birds received with hatchlings. 250 families each received an allotment of 10 hens and a rooster as part of a pilot effort.

School Rehabilitation

USAID originally planned to re-equip, refurbish, and re-supply 570 classrooms in addition to establishing 25 Resource and Outreach Centers in Mitch-affected areas. The last activity was subsequently dropped due to host government resource constraints. Funds were re-programmed to install or rehabilitate potable water systems and latrines in 180 schools, to train teachers to meet the special needs of students traumatized by the hurricane, and to provide teenagers practical skills in after school sewing, auto repair and carpentry training.

In coordination with the Ministry of Education and the World Bank, USAID has expanded the number of classrooms to be assisted to 675 in 220 schools, serving more than 26,000 students. Assistance consists of replenishment of school and teaching materials, supplies, classroom equipment and furniture to be provided through six deliveries over two school years.

- Because field monitoring data indicated that a large percentage of teachers did not know how to make the best use of the USAID donation, 925 teachers from ERC beneficiary schools were trained in the use/management of the donated learning materials, equipment and supplies. Teachers were trained in how to create materials to enrich learning activities and how to make maximum use of classroom materials (e.g. maps, globes, human anatomy and science posters, reference books, dictionaries, mathematics learning games). As a result of this training, teachers and their 25,000 students will now receive the maximum learning benefits from USAID's Mitch donation.

- Nineteen schools in the Pacific region have received a total of 1,700 pieces of replacement furniture benefiting 1,100 students. Fifty-two Rio Coco schools are to receive nearly 4,000 pieces of furniture, of which 1,250 pieces have been delivered or are ready for delivery. 2,785 teachers and students in the Rio Coco region will benefit.



- With re-programmed funds for installing or rehabilitating school wells and latrines, four demonstration schools in San Francisco Libre received full water sanitation facilities. CARE/Nicaragua completed construction and provided training for operations and maintenance to community members. Water sanitation work began at another 100 schools during the quarter, for a total of 105 in the Pacific region and Rio Coco. CARE has already drilled 7 of 46 wells and begun full water/sanitation work on 46 schools in Matagalpa and Leon. In the Rio Coco region, a contract was awarded to a local NGO for facilities at 15 schools. ERC negotiated another contract for work in 40 schools in Estelí, Madriz and Chinandega. All water sanitation work is scheduled to be completed by September, and will benefit 12,200 students.
- A local NGO conducted training for 171 teachers at schools in Nueva Vida and Posoltega on issues related to family violence, which was exacerbated by the trauma of Hurricane Mitch. Half of

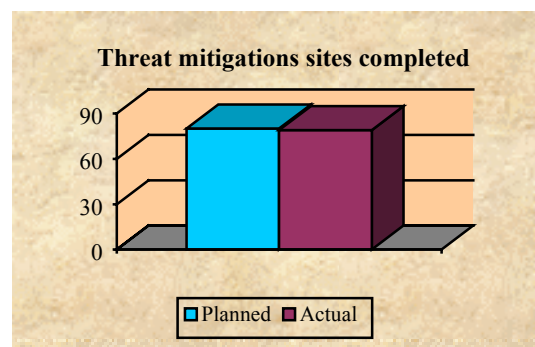
participating teachers reported direct or indirect experiences of family and community violence and sexual abuse of girls, boys and adolescents, and agreed that they have a central role to play in the prevention and treatment of these social maladies. Educating parents on these issues is also critical.

Disaster Mitigation

The Mitch-funded program includes disaster prevention and mitigation efforts such as the construction of drainage and flood control structures, clearing of water ways, and soil stabilization and conservation activities in areas that are prone to flooding, landslides, or other natural disasters.

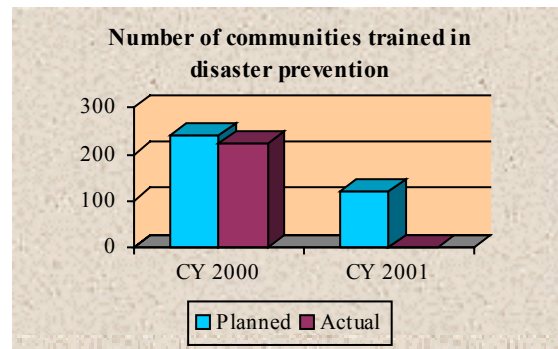
A multi-donor coordination group including USAID, the National Oceanic and Atmospheric Administration (NOAA), the United States Geological Survey (USGS), the Federal Emergency Management Agency (FEMA), the United States Army Corp of Engineers (USACE), and the United States Department of Agriculture (USDA) has been established to help communities prepare for disasters. Training for residents in 350 communities will improve Nicaragua's capacity to prepare for and respond to disasters.

- USAID funds are being used to reduce vulnerability to flooding and other natural disasters, targeting 85 sites benefiting more than 14,700 households in 230 communities.



- NGOs have cleared 20 kilometers of waterways of debris and rubble out of a target of 66 kilometers.
- The Cooperative League of the United States of America (CLUSA) stabilized stream channels to reduce the threat of flooding; and Save the Children used Food for Work to divert a stream that changed course during Mitch and subsequently flooded two communities during the 2000 rainy season.
- CLUSA and the Pan-American Agricultural School (Zamorano) have also restored about 20 kilometers of riverbank along the Rio Estelí near Pueblo Nuevo. The work has involved small-scale construction and the planting of thousands of forest and fruit trees. Residents of the nine communities that will benefit from the project have done most of the work.
- CARE, through community food-for-work, built gabions to protect a well and access road in Los Calpules, in the Department of Estelí, a remote community of 140 families. Similarly, CARE supported community efforts to restore the riverbank and protect the water supply in Esquipulas, a small farming community of 25 families.
- Save the Children has completed work to reduce the risk of floods, landslides, and other natural disasters at seven sites. The community of Terencio Munguia, for example, was subject to flooding during the rainy season. The project rehabilitated a 1800 meter drainage channel and constructed an auxiliary drainage structure to prevent flooding, benefiting 130 families
- A total of 230 communities have been trained in disaster prevention. In the remote indigenous region of the Rio Coco, USAID-supported NGOs have developed regional and local

emergency plans and risk maps for three municipalities encompassing 70 communities. Three emergency committees have been formed in four of the six indigenous territories of the Bosawas Biosphere reserve.



- The USDA is providing approximately \$500,000 in subgrants through a local NGO (UPANIC) to 21 subgrantees to carry out small-scale rehabilitation activities at 93 sites. The activities include clearing and stabilizing of stream channels, reforestation, and recovery of agricultural land, including stabilization of four kilometers of streambed along the Rio Nuevo and the rehabilitation of 1.8 kilometers of irrigation channel in Ocotal. By the end of June, work was almost complete at 25 sites, and underway at the remainder.
- 1 million has been programmed to finance larger mitigation activities of a Nicaraguan municipal development organization, FISE. Construction designs have been completed and construction contracts awarded for six sites. The largest of these (at \$186,000) is at La Quimera, near Telica, where erosion of an embankment has cut a 23-foot bluff that is moving upstream, threatening homes and roads, including a main highway. The USDA/FISE effort will prevent further erosion. "Stream barbs" are also being constructed at the site to

channel water under a bridge, reducing the risk of damage during floods.

- USACE fielded a team of dam safety experts that worked with engineers of Nicaragua's Institute of Territorial Studies (INETER) and Electric Company (ENEL) to evaluate four Mitch-affected dams. Two of the dams were found to be seriously damaged. Failure of either structure would be catastrophic, since they produce one third of the nation's electrical power. USAID and USACE reprogrammed \$400,000 to finance designs for the repair of these two structures

Municipal Restoration

The role of local governments in reconstruction will be strengthened by USAID's preference to channel funds through local governments. Eleven projects, such as drainage ditches, road resurfacing and reinforcing riverbanks will be completed with community participation. (The previous target of 20 was reduced to permit reallocation of funds to higher priorities.)

- Five projects have been completed including repair of the Posoltega dike, construction of a containment wall in Matagalpa to control flooding by the Rio Grande River, construction of storm drains for a 20-block area in the city of Leon, and rural roads in the municipalities of Yalagüina and San Lucas.
- Five more projects will be finished in early August: storm drainage systems in the municipalities of Quezalguaque and Estelí, street paving in the municipalities of Palacaguina and El Tuma-La Dalia, and reconstruction of a river deck and platform in the municipality of Wiwili.

Transparency and Accountability

USAID has obligated \$1 million to the Inter-American Development Bank (IDB) for a program to ensure transparency in the use of

both donor and national disaster funds; anticorruption measures and accountability for Mitch-related programs and regular Government of Nicaragua (GON) programs. USAID's contribution leverages an IDB \$20 million loan that was approved in September 2000 to support the establishment of an Inspectorate to provide both concurrent and special audits of GON investment projects during reconstruction.

Program Monitoring and Management

- Private audit firms and the Defense Contract Audit Agency have completed twenty-two audits, with no material findings. USAID has completed three program evaluations, also with no major findings.

USAID Finances Life-Saving Radio Communication System

Medical staff in the northern department of Jinotega saved month-and-a-half year old Yader Jose Garcia by radioing for an ambulance to take him from his community to the departmental hospital where he was treated for pneumonia. If this had happened to a child a few months ago, the child probably wouldn't have been able to get to a hospital and would have died.

Yader was saved by a radio recently installed in the health post of Los Alpes, a remote community located in the mountains. In fact, that same day, on May 29, 2001, two other lives were saved when the ambulance that carried Yader was radioed to pick up two more patients along the route to the hospital.

"They would have died, if we didn't have the radio," said Los Alpes health center nurse Flavia Zeledon.

The radio like the one in Los Alpes, is part of a communication system, financed by USAID, that is providing a vital life-saving link between distant, outlying health posts and municipal hospitals and ambulances. USAID, through the PROSALUD project, purchased 218 stationary and mobile radios, six repeaters and 40 solar panels at a cost of \$300,000. This system, when fully operational, will permit rapid, reliable and permanent communication between all of the health centers, hospitals and ambulances in three departments that were heavily affected by Hurricane Mitch. The system will also link into the larger Ministry of Health communication network providing coverage to 77 percent of the country.

Dr. Ninette Palacios Rizo, Ministry of Health director for the Jinotega municipality, reports that since the installation of the radios on March 20 of this year, 17 maternal deaths and three infant deaths were avoided with the rapid communication and transfer of the patients to the hospital. At the Victoria Motta Hospital in Jinotega, Dr. Bernarda Tinoco said the medical center is receiving a daily average of 50 consultations and about 10 patient transfers using the USAID-funded radio communication system.

Said Dr. Tinoco: "Of course the radios have made a difference—we're saving lives."

